

**CERTIFICATE OF TRANSMISSION UNDER 37 C.F.R. §1.8**

I hereby certify that this correspondence, including recited attachments, is being electronically transmitted to the Commissioner for Patents in the United States Patent and Trademark Office on the date below:  
Date: June 19, 2008 Name: Richard E. Stanley, Jr. Signature: /Richard E. Stanley, Jr./ Reg. No. 45,662

Our Case No. 4865-162

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of:	)	
	)	
David E. Daws et al.	)	
	)	Examiner: Rudy Zervigon
Serial No.: 10/658,988	)	
	)	Group Art Unit No.: 1792
Filing Date: September 9, 2003	)	
	)	Confirmation No.: 4219
For: HARDWARE ASSEMBLY FOR	)	
CVI/CVD PROCESSES	)	

**DECLARATION OF MR. JAMES W. RUDOLPH  
UNDER 37 C.F.R. § 1.132**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, Virginia 22313-1450

Dear Sir:

Now comes James W. Rudolph, one of the inventors of the above-identified patent application, who declares and states:

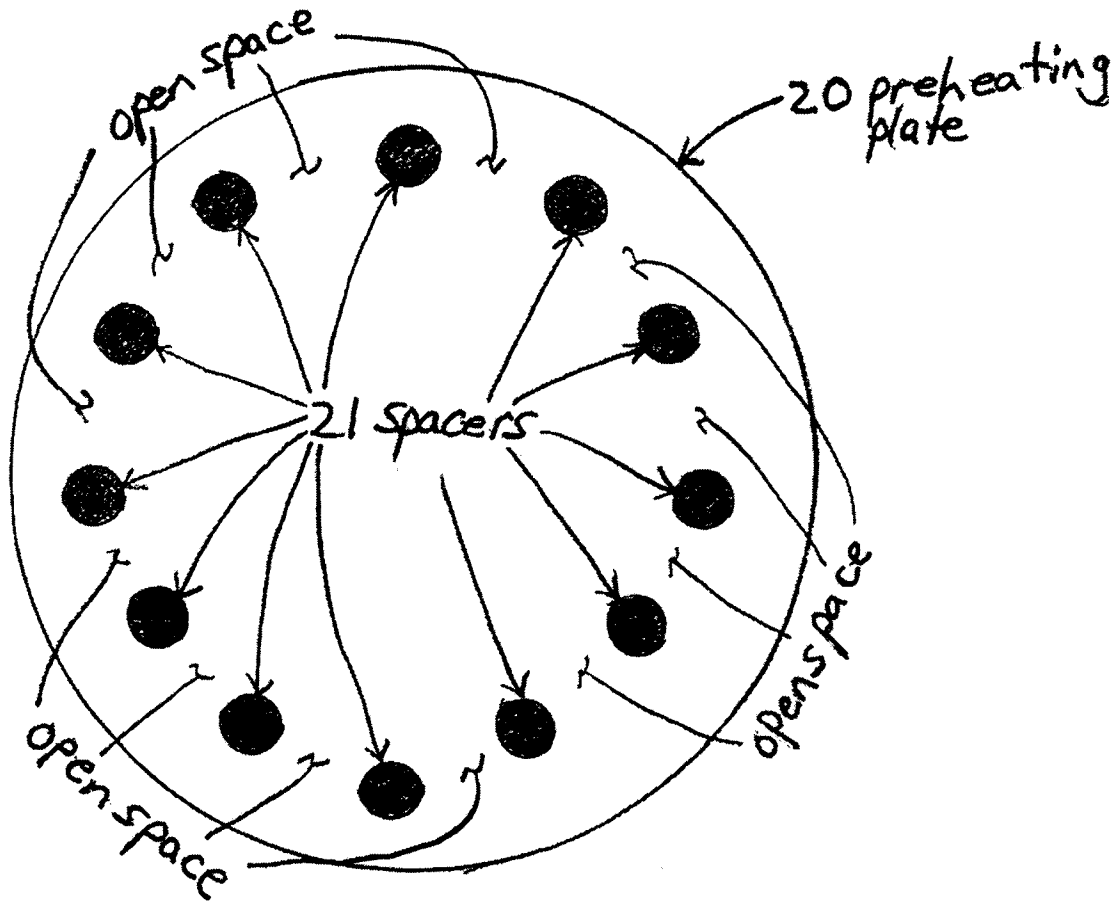
1. I live at Colorado Springs, CO and am currently employed as a Principal Engineer at Goodrich Corp. I have been employed by Goodrich Corp. since 1992. During my employment at Goodrich Corp. starting in 1992, I have been responsible for research and development work for CVI/CVD processes and furnace designs for densifying carbon-carbon brake disks. I was also employed in the carbon-carbon industry prior to my employment at Goodrich Corp. and have over 20 years of experience in the carbon-carbon industry. I consider myself to be one of ordinary skill in the art of furnace designs for densifying carbon-carbon brake disks and have had such skill since before the subject matter of the above-identified application was conceived.

2. I have reviewed the Office Action dated March 21, 2008, in the above-identified patent application and the disclosure of Christin et al. (U.S. Patent No. 5,904,957). It is my understanding that the Examiner has argued that Christin et al. discloses a "sealed preheater" as presently claimed in the above-identified patent application. After a careful review of Christin et al., I respectfully disagree with the Examiner that Christin et al. discloses a sealed preheater. Accordingly, I hereby make the following evidentiary statements in order to establish how one of ordinary skill in the art would interpret the sealed preheater as claimed in the present pending application.

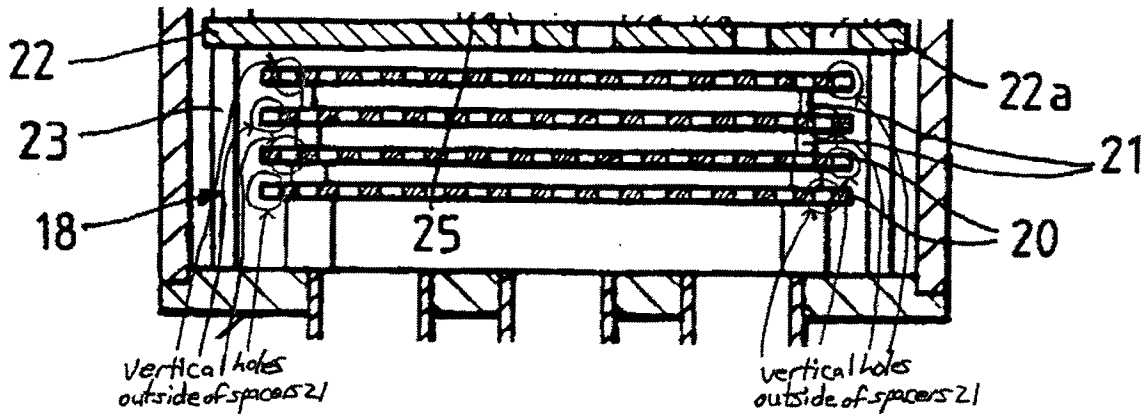
3. One of ordinary skill in the art would understand the term "sealed preheater" to mean a preheater that is sealed so that substantially all of the incoming gas flow from the inlet ducts passes through the preheater and exits the preheater through the preheater discharge openings. In other words, a sealed preheater does not allow the incoming gas to freely escape from the sides of the preheater.

4. The Examiner's characterization that the claimed preheater is nothing "more [than a] heater in an already 'sealed' chamber" is incorrect. A "sealed preheater" does not merely mean a heater that is in an already sealed chamber. Instead, a sealed preheater means that the preheater itself is sealed and that the preheater does not allow gas to escape from the preheater (except from the discharge openings of the preheater).

5. By contrast, Christin et al. does not disclose a sealed preheater. Instead, Christin et al. states that the preheating plates 20 are spaced apart from each other by "spacers 21." (Col. 6, lines 12-14). Christin et al. also states that the diffusing plate 22 rests on "legs 23." (Col. 6, lines 18-19). As shown in Figure 2, spacers 21 and legs 23 are shown without cross-hatching, which indicates that these structures are formed from multiple spacers 21 and legs 23 that are spaced apart from each other around the circumference of the furnace. By contrast, Christin et al. shows structures that are solid around the circumference of the furnace with cross-hatching (e.g., preforms 12, support tray 15a, susceptor 19, diffusing plate 22). Thus, as illustrated below, one of ordinary skill in the art would interpret Christen et al. as disclosing an unsealed preheater with open spaces around the circumference of the preheater between a plurality of spacers 21.



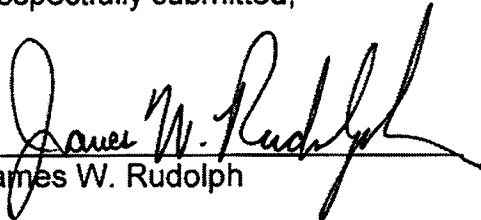
6. In addition, Christin et al. also discloses vertical passages through the preheating plates 20 that are located outside of the spacers 21. This further confirms that the preheater in Christin et al. is not sealed because it would make no sense to position the vertical passages outside of the spacers 21 if the preheater was sealed by the spacers 21. The outer vertical passages are labeled in the reproduction of Figure 2 from Christin et al. below.



7. Therefore, one of ordinary skill in the art would not interpret the spacers 21 as being solid around the circumference of the preheater to seal the sides of the preheater. Instead, one of ordinary skill in the art would interpret Christin et al. as disclosing an unsealed preheater that allows gas to escape through the open spaces between adjacent spacers 21.

8. I state that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with knowledge that willful false statements are the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of this application or any patent issuing thereon.

Respectfully submitted,

  
 James W. Rudolph